THE PSYCHOLOGICAL WELL-BEING OF ADOLESCENT PARENTS AND THEIR NON-PARENTING PEERS

By

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CHAPTER I

INTRODUCTION

Last year, Becky Johnson's room was a typical teenager's bedroom with posters on the walls, and jewelry, barrettes, and clothes piled on the bed and dresser. These days, with a crib, a changing table and baby toys thrown on the floor, it looks like a nursery, which it is. The change in Becky's room is nothing in comparison to the changes in her life since she gave birth to her son Bobby, now seven months old. "On my birthday, I didn't feel like I'd turned 17; I felt like I'd turned 30," says Becky. Bobby Johnson is one of about 500,000 babies born during the past 12 months to adolescent mothers, girls who are still in the process of growing up themselves.

Becky Johnson is not alone in her challenges of teen parenting; this scenario is replayed by a half a million times every year (National Center for Health Statistics, 1999). The event of becoming pregnant or a parent as a teenager is increasingly becoming a normative event in American high schools and homes.

Problem Statement

Today, adolescent pregnancy and parenting is one of the most significant social problems in the United States. According to the National Center for Health Statistics (1999), the number of births to adolescents in 1997 was 500,062. The number of births

in 1997 for 10-14 year-olds was 10,852; for 15-19 year-olds was 183,324; and for 18-19 year-olds was 305,886. This is at the rate of 52.9 live births per every 1,000 adolescents in 1997. These adolescents are choosing parenting over abortion and adoption more often (Ventura, Martin, Curtin, & Mathews, 1997). Only three percent of pregnant adolescents who carry a baby to term will place their baby for adoption today (Sobol & Daly, 1992). These statistics are evidence that adolescent pregnancy and parenting impacts the lives of many adolescent males and females.

This study sought to understand how the experience of a non-normative event, such as adolescent parenthood, is related to the psychological well-being of the adolescent experiencing the event. Parenthood interrupts a number of the psychological tasks of adolescence, which in turn can have psychological effects on the adolescent. "The psychological significance of pregnancy has its own impact on the psychological development and sexuality of adolescent girls and boys" (Group for the Advancement of Psychiatry,1986). This study looked at the level of self-esteem before the pregnancy, and then measured self-esteem and depressive symptomatology after the adolescent became a parent to determine the adaptation of the adolescent to parenthood. The problem examined in this study is how the event of becoming a parent as an adolescent impacts self-esteem and if they are more likely to express depressive symptoms later in life, than their non-parenting peers.

Purpose of the Study

The purpose of this study was to determine if gender, parental status, and level of self-esteem pre-pregnancy could predict self-esteem and depressive symptomatology after the adolescent became a parent.

Research Questions

This study sought to answer questions about the effects of parenthood on adolescent parents' psychological well-being. Does becoming a parent as an adolescent affect their psychological well-being? How do adolescent parents fare psychologically compared with their non-parenting peers? These questions were answered by determining whether self-esteem in adolescent parents was lower than their non-parenting peers. Also, psychological well-being was measured by whether adolescent parents expressed more depressive symptomatology than their non-parenting peers. Other questions addressed in this study were if parental status, gender, and self-esteem could predict self-esteem and depressive symptomatology later in life.

Definition of Terms

To understand the nature of the study, the constructs used for measuring psychological well-being need to be clarified.

Self-esteem

For the purpose of this study self-esteem is defined as "a person's feeling that he or she is an important, competent, powerful, and worthwhile person whose efforts to be autonomous and take initiative are respected and valued by others" (Harter, 1983).

Depressive Sypmtomatology

Depressive symptomatology is symptoms of depression. Depression is defined as "feelings of extraordinary sadness and dejection" (Carson & Butcher, 1992). Depression is also described as "feelings of dejection and down-heartedness, a sense of decreased self-worth and self-esteem, reduced interest in the future and planning for it, difficulty concentrating, problems in getting to sleep or staying asleep, and a pervasive feeling of fatigue and ennui" (Wallace, Goldstein, & Nathan, 1987).

CHAPTER II

REVIEW OF THE LITERATURE

Psychological Characteristics of Adolescents

It is important to first understand the psychological well-being of adolescents before examining the psychological well-being of adolescent parents. During the transition from late childhood to adolescence, potentially stressful changes occur in adolescents' physical and cognitive realities (Kidwell, Fisher, Dunham, & Baranowski, 1983). During the adolescent years, adolescents develop the skills and the ability to study, work, play, and through social exploration begin to transform the immaturity, habits, and attitudes of childhood into responsible adult behaviors (Group for the Advancement of Psychiatry, 1986).

Given the stressful nature of the period of adolescence it would be expected that a personality variable such as self-esteem to change during this period. Development, particularly in the adolescent years, is a process in which many components influence each other. Professionals from multiple disciplines have examined the variables most critical to healthy development (Quadrel, Fischhoff, & Davis, 1993; Zaslow & Takanishi, 1993). The psychological construct of self-esteem has been found to influence many aspects of adolescent life. Also, the issue of depressive symptomatology in adolescence is another indicator of psychological well-being, and will be addressed in this study.

These personality variables have been used in many research studies and the findings of these studies are reviewed here.

Adolescent Parents

In addition to the normal stresses of adolescence, the parenting adolescent is forced to cope with the additional stress of first-time parenthood. Parenthood will undoubtedly have an impact on the psychological well-being of an adolescent parent due to the role changes that accompany the transition to parenthood. These changes include the psychological preparation for parenthood; changes in the relationships with the adolescent's own parent, as well as the other parent of the child; adapting to child-care responsibilities; and identifying with the new role of parenting (Cowan & Cowan, 1992). Parenthood is demanding and leaves little time for normative life events, which occur during the adolescent years. Adolescent parents often miss out on the activities in which their non-parenting peers participate.

The use of representative samples and comparison groups of non-parenting adolescents are needed in the research on adolescent parents (Coley & Chase-Lansdale, 1998). Research focused on comparing the psychological well-being of non-parenting adolescents to parenting adolescents is lacking in the current literature.

Adolescent Mothers

According to Brooks-Gunn and Chase-Lansdale (1995), lives of teenage mothers are very different from their peers who do not become mothers while still an adolescent. According to Weinraub and Gringlas (1995), the research on the psychological adjustment and coping skills of single teenage mothers over time is needed.

There has been research on adolescent mothers, but not in the area of the psychological effects of unplanned and early parenthood (Coley & Chase-Lansdale, 1998). Through the research conducted on adolescent pregnancy, the demographics of teenage childbearing have been studied; however, limited research has addressed the psychological effects of the pregnancy upon the adolescent parents, as well as how the event affects their psychological well-being over time. According to Coley and Chase-Lansdale (1998), there has been little research addressing the psychological affects of adolescent pregnancy and parenting or how some adolescent mothers adapt well to the pregnancy and others do not overcome the disruptive experiences of becoming a parent as an adolescent. There is little psychological evidence for early acceptance or emotional upset in the lives of the adolescents who are becoming parents at an early age due to the sociologically oriented research on this issue (Brooks-Gunn & Chase-Lansdale, 1995).

Adolescent Fathers

Unlike adolescent mothers, detailed information on adolescent fathers is not as represented in the literature (Landry & Forrest, 1995). Most of the research on adolescent parenting is focused on mothers and their children (Pirog-Good, 1995). Similar to their female peers, becoming an adolescent father has negative consequences, although this issue needs more attention (Lerman, 1993). Coley and Chase-Lansdale (1998) have found little research on psychological functioning of young fathers. According to Pirog-Good (1995), there is not evidence in the current literature regarding the attitudes of adolescent fathers. Coley and Chase-Lansdale (1998) also state, "The effects of early fatherhood on male adolescent's emotional functioning is clearly deserving of further attention" (Coley & Chase-Lansdale,1998; p.160).

The transition to fatherhood is difficult for teenage boys (Robinson & Barret, 1987). Coping with the many role changes of fatherhood, along with the changes that occur during adolescence, can cause the adolescent father to have difficulty in coping with all the changes. The adolescent father can suffer psychological conflict over the simultaneous roles of adolescent and father. Also, adolescent fathers often show signs of clinical depression and stress (Elster & Panzarine, 1983).

Self-esteem in Adolescence

The relation between self-esteem and other variables during adolescence have been widely researched. Low self-esteem has been correlated with low life satisfaction, loneliness, anxiety, resentment, irritability, and depression (Rosenberg, 1985). Blyth & Traeger (1988) found a correlation between high self-esteem and perceived intimacy with parents. High self-esteem has also been correlated with academic success in high school (O'Malley & Bachman, 1983), internal locus of control, higher family income, and positive sense of self-attractiveness (Griffore, Kallen, Popovich, & Powell, 1990).

Self-esteem and Change Over Time

Findings whether self-esteem changes over time, have produced conflicting results. Some research has shown that self-esteem rises during adolescence and early adulthood (Bachman, O'Malley, & Johnston, 1983; Cairns, McWhirter, Duffy, & Barry, 1990; Chiam, 1987; McCarthy & Hoge, 1982). Zimmerman, Copeland, Shope, and Dielman (1997) found self-esteem to decrease in adolescence. In a cross-sectional study of adolescent self-esteem, Rosenberg (1975) found that self-esteem dropped during early adolescence, with the greatest decrease at age 12. From that point it gradually increased,

with a burst at age 16. Another study found that once self-esteem is established, it is resistant to change other than what results from normal developmental processes (Fertman & Chubb, 1992). Savin-Williams and Demo (1984) also measured self-esteem in adolescence and concluded that self-esteem is a stable, enduring aspect of personality.

A longitudinal study of self-esteem during adolescence by Zimmerman, Copeland, Shope and Dielman (1997) indicated change over time. Data on self-esteem was collected on 1,160 adolescents from 6 school districts in southeastern Michigan for four years using the shortened version of Coopersmith's Self-Esteem Inventory of 17 items. This measure addresses four domains of self-esteem: global, school, peers, and family. Scores can range from 0-17. The study began when the adolescents were in the sixth grade and continued through the tenth grade. Female adolescents were more likely to have decreased self-esteem and males to have higher self-esteem during this time period of adolescence. Data from this study from the total sample indicated self-esteem decreasing over time from 6^{th} to 10^{th} grade.

Another study indicated change over time in adolescence. Wigfield, Eccles, Iver, Reuman, & Midgley (1991) studied twelve school districts in the mid-western United States. The sample consisted of 1,850 students. The students were in the 6^{th} grade at the beginning of the study. The measure used was Harter's General Self-Worth Scale with scores ranging from 5 to 20 with higher scores indicating a higher self-esteem. Decline in self-esteem was found, and this decline corresponded with a change in school. Their self-esteem rose again after the initial transition period was over.

McCarthy and Hoge (1982) studied the effects of age on adolescent self-esteem between the ages of 13 and 18. The 1,970 subjects were students from 13 schools in two

mid-Atlantic cities. The sample was 55% male and 49% white. Global self-esteem was measured using the Rosenberg Self-Esteem Scale and the 25 item Coopersmith Self-Esteem Inventory. Results indicated that there are significant increases in self-esteem with increase of age.

O'Mally and Bachman (1983) studied change in self-esteem between the ages of 13 and 23. Their sample consisted of 1,200 subjects selected from high school students in 48 states. Self-esteem was measured using a scale adapted from the Rosenberg Self-Esteem Scale. Self-esteem was found to increase in the first four years after high-school. The average annual increase in self-esteem from the ages of 18 to 22 is about 13%. They find this to be consistent with McCarthy and Hoge's (1983) findings for ages 13 to 18. The authors conclude that self-esteem rises from the age of 13 through 23 years of age.

Another study supports the findings of McCarthy and Hoge (1983) and O'Mally and Bachman (1983). Cairns, McWhirter, Duffy, and Barry (1990) reported self-esteem increases in late adolescence. The sample of 2490 was drawn from Northern Ireland, which was 53% female, with a mean age of 17 years. The measure of self-esteem was the Harter Perceived Competence Scale for Children, which has a measure of general self-esteem. Scores on overall self-esteem increased significantly from Time 1 to Time 2.

Mullis, Mullis, and Normandin (1992) studied 1,178 high school students from mid-western part of the United States for self-esteem using both longitudinal and cross-sectional designs. Data was collected on all the students in all grades for the cross-sectional sample. A longitudinal sample was also used consisting of 270 students, 140 males and 130 females. The data was collected on the longitudinal sample in 9th grade,

10th grade, and 11th grade. Self-esteem was measured using the Coopersmith Self-Esteem Inventory school form consisting of 58 items. The data indicated that grade level was influential on self-esteem in the longitudinal design, but not the cross-sectional design. For the cross-sectional design no corresponding increase in self-esteem was found with grade level increase. The longitudinal design showed self-esteem to increase over the four-year period of high school.

Other changes in self-esteem have been found. In contrast to these studies, a study by Thornburg and Jones (1982) found self-esteem to vary in the age groups. This study consisted of 2561 students in 4th through 9th grade in four schools in North and South Carolina. The Rosenberg Self-Esteem Scale was used to measure self-esteem. Results indicated that self-esteem was highest among nine and ten year-olds and then decreased at age 11, and increased again at the ages of 12, 13, 14, and 15.

Rosenberg (1975) studied self-esteem in 1988 children in grades 3-12 from Baltimore City. The Rosenberg Self-Esteem Scale was used to study self-esteem for the sample. Findings indicated self-esteem dropping during early adolescence, with the greatest decrease at age 12.

Other studies have shown no differences in self-esteem throughout the course of adolescence. In a 1992 study by Fertman and Chubb, studied self-esteem in adolescents. The sample consisted of 52 ninth-grade students 25 males and 27 females from a small working-class suburban area, and rural farm acreage. The purpose of this study was to determine if a psychoeducational program had an impact on the adolescent's self-esteem, locus of control. Self-esteem was assessed using the Rosenberge Self-Esteem Scale of

ten questions with response choices ranging from strongly agree to strongly disagree. During the nine months of this study self-esteem remained stable.

A study by Chubb, Fertman, and Ross (1997) used the Rosenberg Self-Esteem Scale with a sample of 174 adolescents from a middle-class suburban area and rural area for four years. Findings indicate sex differences in adolescent self-esteem. Results of this study indicated that self-esteem did not change over the four years of high school.

Chapman and Mullis (1999) studied relations between self-esteem and coping strategies of adolescents. The participants in their study were 361 male and female adolescents from grades 7 to 12 in rural communities in a southern state predominately middle and lower class. Coping strategies were assessed by the Adolescent Coping Orientation for Problem and self-esteem was assessed by the Coopersmith's Self-Esteem Inventory. Chapman and Mullis found no age differences in self-esteem.

Savin-Williams and Demo (1984) had similar findings. They studied self-esteem in longitudinal study of adolescents. The sample was randomly drawn from a school list. The sample consisted of 20 males and 21 females with a mean age of 12.3 at the beginning of the study. The mean age at the end of the study was 15.2 years. Self-esteem was measured using several measures. A behavior checklist of 20 behavior descriptions was used to measure high and low behaviors of self-esteem. Peer ratings were also used. The Rosenberg Self-Esteem Scale and the Coopersmith Self-Esteem Inventory of 54 items were used as well. Both the Rosenberg and the Coopersmith scores indicated a slight shift in 9^{th} and 10^{th} grade, but not enough to be significant. The findings of this study indicated self-esteem to be stable.

Self-esteem and Gender Differences

Findings also have been mixed for studies addressing self-esteem and gender differences in adolescence. Mullis, Mullis, and Normandin (1992) found no differences in self-esteem by gender and this is consistent with findings by Fertman and Chubb (1992). Other studies have found adolescent males to have higher self-esteem than their female peers (Richman, Clark, & Brown, 1985; Wigfield, Eccles, Iver, Reuman, & Midgley, 1991; Nottelmann, 1987; Bohen, 1973; Cairns, McWhirter, Duffy, & Barry, 1990; Chiam, 1987; Zimmerman, Copeland, Shope &Dielman; 1997). In contrast, a study by Thornburg and Jones (1982) found females to have higher self-esteem than males.

Mullis, Mullis, and Normandin (1992) studied 1,178 high school students from a mid-western state for self-esteem. Data was collected on all the students in all grades for the cross-sectional sample. A longitudinal sample was also used consisting of 270 students, 140 males and 130 females. The data was collected on the longitudinal sample in 9th grade, 10th grade, and 11th grade. Self-esteem was measured using the Coopersmith Self-Esteem Inventory School Form consisting of 58 items. Self-esteem did not differ by gender.

Other studies do not report the same findings regarding gender and self-esteem. A study by Wigfield, Eccles, Iver, Reuman, and Midgley (1991) found differences between males and females in self-esteem. They studied twelve school districts in the mid-western United States. The sample consisted of 1,850 students. The students were in the 6th grade at the beginning of the study. The measure used was Harter's General Self-Worth Scale, scores ranged from 5 to 20 with higher scores indicating a higher self-

esteem. The authors did not find an increase in gender differences over the four waves of the study, but males consistently reported higher self-esteem than did females in all four waves of the study.

Nottlemann (1987) had similar findings. The authors studied self-esteem during the transition from childhood to adolescence. The sample was composed of 212 males and 233 females enrolled in schools in central Maryland. The mean ages were 10.95 and 11.9 years of age. Ninety –five percent of the sample was White. Self-esteem was measured using Harter's Perceived Competence Scale for Children. It measures cognitive, social, and physical competence, as well as global self-esteem. Findings indicated significant sex differences at all three times of measurement. The physical competence scores were higher for boys than for girls. Boys had higher self-esteem in relation to school performance and girl's had higher self-esteem in relation to friendships.

A longitudinal study of self-esteem during adolescence by Zimmerman, Copeland, Shope and Dielman (1997) indicated females had lower self-esteem than males. Data on self-esteem was collected on 1,160 adolescents from 6 school districts in southeastern Michigan for four years using the shortened version of Coopersmith's Self-Esteem Inventory of 17 items. This measure addresses four domains of self-esteem: global, school, peers, and family. Scores can range from 0-17. The study began when the adolescents were in the sixth grade and continued through the tenth grade. Female adolescents were more likely to have decreased self-esteem and males to have higher self-esteem in this study. Interesting findings were that females used alcohol when having a higher self-esteem, while males used alcohol to cope with decline in self-esteem.

Richman, Clark, and Brown (1985) had similar findings. They studied self-esteem in 195 high-school students in three public schools in North Carolina. The students had a mean age of 16.2 years. The sample was 48% female and 75% Black. General self-esteem was measured using the Rosenberg Self-Esteem Scale and the Piers-Harris Children's Self-Concept Scale (PSCS). The PSCS describes self-esteem in terms of their behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction. The white students had a lower self-esteem than the black students. White females scored significantly lower in general self-esteem than white males, black males, and black females.

Rosenberg (1975) studied self-esteem in 1988 children in grades 3-12 from Baltimore City. The Rosenberg Self-Esteem Scale was used to study self-esteem for the sample. Findings indicated that 41% of females between the ages 12 and 14 exhibited high self-consciousness whereas only 29% of males the same age were self-conscious. Also, on measures of self-esteem 32% of these same females scored very low on self-esteem compared to 26% of males the same age. There were fewer significant differences between males and females between the ages of 8 and 11.

Bohan (1973) found differences in self-esteem according to gender. The number in the sample was not reported, however the sample was reported to come from New York public schools. The students were in the 4^{th}, 6^{th}, 8^{th}, and 10^{th} grade. Self-esteem was measured using the Coopersmith Self-esteem Inventory of 50 items. The only significant difference in self-esteem was found among 10^{th} grade females. They scored lower than their male peers and their female peers of other age groups. Other comparisons among age and sex were not significant.

Chiam (1987) studied self-concept in Malaysian adolescents of different ages; this conceptualization of self-concept included self-esteem. Chiam's study consisted of 375 adolescent males and 289 adolescent females with mean ages in the three groups 14.6, 16.3 and 17.1. Nonacademic self was considered to be self-esteem. The instrument used in this study to measure nonacademic self was the Tennessee Self-Concept Scale. Nonacademic self appeared to be lower in younger males than the older. No trends in nonacademic self were found for females.

Chapman and Mullis (1999) studied the relationship between self-esteem and coping strategies of adolescents. The participants in their study were 361 male and female adolescents from grades 7 to 12 in rural communities in a southern state predominately middle and lower class. Coping strategies were assessed using the Adolescent Coping Orientation for Problem and self-esteem was assessed by the Coopersmith's Self-Esteem Inventory. Findings indicated that adolescents with lower self-esteem utilized more avoidance coping strategies than adolescents with higher self-esteem. In addition, males reported utilizing avoidance coping strategies more frequently than females. Other findings of this study were that females were found to utilize social and spiritual supports more frequently than males.

Cairns, McWhirter, Duffy, and Barry (1990) reported males to have higher self-esteem than females. The sample of 2,490 from Northern Ireland was 53% female, with a mean age of 17 years. The measure of self-esteem was the Harter Perceived Competence Scale for Children, which has a measure of general self-esteem. Results indicated that males scored higher than females on overall self-esteem.

A study by Chubb, Fertman, and Ross (1997) used the Rosenberg Self-Esteem Scale with a sample of 174 adolescents from a middle-class suburban area and rural area for four years. Findings indicate gender differences in adolescent self-esteem. Females had significantly lower self-esteem than males in all grades.

In contrast to these studies, a study by Thornburg and Jones (1982) found females to have higher self-esteem than males. This study consisted of 2561 students in 4th through 9th grade in four schools in North and South Carolina. The Rosenberg Self-Esteem Scale was used to measure self-esteem. Results indicated that females reported significantly higher levels of self-esteem than males.

Self-esteem and Adolescent mothers

There is conflicting information on the relationship between self-esteem and teenage pregnancy and parenting. Some researchers (Horn & Rudolph, 1987; Zongker, 1977; Patten, 1981; Keddie, 1992; Holden, Nelson, Velasquez, & Ritchie, 1993; Barth and Schinke, 1983) have documented a relationship between low self-esteem and adolescent pregnancy. Others (Medora, Goldstein, & von der Hellen, 1994) have found no difference in the self-esteem of pregnant and non-pregnant adolescents.

A study by Medora, Goldstein, and von der Hellen (1994) used comparison groups to study adolescent mothers and their non-parenting peers focusing on self-esteem. Participants in this study were 649 female adolescents. Of these adolescent females, 255 were pregnant, 121 were adolescent mothers, and 273 were adolescent non-mothers. No significant differences were found for the pregnant teens, teen mothers, and the non-mothers. The pregnant teens and teen mothers had a slightly higher mean self-esteem score than the non-mothers did. There was a significant difference in the self-

esteem scores for the adolescents belonging to the different ethnic groups. The African American adolescents scored highest in self-esteem, followed by the Latinos, Anglos, and Asians. When the significant interaction between ethnicity and age was examined, self-esteem remained stable with age for the Anglo and Latino subjects. However, the African American subjects' self-esteem scores tended to increase with age, and the Asian adolescents' scores tended to decrease with age.

In contrast to those findings, Patten (1981) studied self-concept and self-esteem in adolescents during pregnancy and found adolescent mothers to have lower self-esteem than their non-parenting peers. Data was collected from 37 pregnant adolescent females in Nashville, Tennessee. Self-esteem was measured using the Rosenberg Self-Esteem Scale. The scores on self-esteem for pregnant adolescent females were lower than the national average for adolescent females.

Another study indicating a lower self-esteem in adolescent mothers is a study by Keddie (1992). The sample of Jamaican females consisted of 134 females who have never been pregnant and 108 who had been pregnant or were pregnant. The females were between the ages of 14 and 17. Self-esteem was measured using the shortened form of the Coopersmith Self-Esteem Inventory. Results indicated that self-esteem was higher in the never-been pregnant group than the group of females who had been pregnant.

Holden, Nelson, Velasquez, and Ritchie (1993) compared pregnant and non-pregnant adolescents in the areas of cognition, psychosocial, and sexual behavior. This study included 69 pregnant adolescent females and 58 non-pregnant adolescent females. Five tests were used to measure self-esteem. Findings indicated no differences in self-esteem between pregnant and non-pregnant adolescent females using Rosenberg's Self-

Esteem Scale. In contrast, when the Harter's subscale of global self-worth, a reliable difference was found. Non-pregnant adolescents had a higher perception of self-worth than the pregnant adolescent females.

Horn and Rudolph (1987) studied 23 unmarried adolescent mothers between the ages of 13 and 19 from Tennessee. The Tennessee Self-Concept Scale was used to measure the self-concept of the adolescents. Results of this study indicated that adolescent mothers have significantly lower levels of self-concept than the general population.

Zongker (1977) also used the Tennessee Self-Concept Scale to measure self-concept in 88 adolescent mothers from northern Florida. He had similar findings. This study found adolescent mothers to exhibit poor self-esteem, significantly lower self-esteem than the control group.

A 1983 study conducted by Barth and Schinke used 62 pregnant adolescent females, 63 parenting adolescent females, and a comparison group of 60 non-parenting adolescents from a major northwestern metropolitan area. This study focused on depression, anxiety, loneliness, self-esteem, socioeconomic status, and social supports. Self-esteem was measured using the Rosenberg Self-Esteem Scale. The pregnant and parenting females reported significantly lower self-esteem than the non-parenting adolescents.

Self-esteem and Adolescent Fathers

A study by Pirog-Good (1995) used NLSY (National Longitudinal Survey- Youth Cohort) data to examine the family backgrounds and attitudes of 6,403 adolescent fathers. Of particular interest, this study looked at three key attitudinal measures: self-esteem,

depression, and locus of control. Self-esteem was measured using the Rosenberg Self-Esteem Scale. This study indicated that White adolescent fathers had lower self-esteem than Black adolescent fathers. This study did not look at the fathers in comparison to their non-parenting peers. The self-esteem of Black fathers was not affected by becoming a parent.

Elster and Panzarine's 1983 study consisted of interviewing 20 adolescent fathers, between the ages of 17 and 18. The fathers were interviewed 44 times each during the pregnancy and in the hospital after the birth of the child. The focus of the study was to identify the types of stresses experienced by adolescent fathers. The stresses impacting the adolescent fathers were clustered in the area of economical strains, educational and employment issues, and difficulty with relationships with their child and the mother of their child. Those adolescent fathers who fail to support their partners may suffer a decline in self-esteem.

Rivara, Sweeney, and Henderson (1985) studied 100 adolescent fathers and non-fathers between the ages of 14 and 19 years. The majority of the adolescent fathers were Black and from families of low socioeconomic status. The comparison group was formed from males seeking care at the same hospital's surgical, orthopedic, and emergency room clinics as the mother of the adolescent fathers' child received treatment. Findings indicated more similarities than differences between the two groups in the area of family background and personality adjustments. A difference was found in the acceptance of adolescent pregnancy. Adolescent fathers were significantly more likely accept adolescent pregnancy in their families as a common occurrence and as minimally disruptive of their current or future lives. This sample of adolescent fathers viewed

adolescent fatherhood as a normative cultural experience that may account for the absence of anxiety or poor self-concept among the adolescent fathers in the sample.

Depressive Symptomatology

Depression in adolescents is an issue of interest to researchers. Studies on psychiatric disorders during adolescence have found a low incidence of moderate to severe depression, between 7% and 33% (Peterson, Compas, Brooks-Gunn, Stemmler, Ey, & Grant, 1993). Cicchetti and Toth (1998) attribute the understanding of depression in adolescence to understanding the interrelationships among many components, such as biological, psychological, and social-system components.

Depressive Symptomatology and Change Over Time

Findings on depression and depressive symptomatology and its relationship to age have been mixed. Some studies have shown depression does not change with age, and others have shown change. The findings will be reviewed here.

Chen, Mechanic, and Hansel (1998) conducted a longitudinal study of the relationship between self-awareness and depressive symptomatology in 479 adolescents from 19 public schools in five communities in New Jersey. The data was collected first when the adolescents were in the 7^{th} grade, then in the 8^{th}, 9^{th}, and last when they were out of high school and approximately 20 years old. Depressive symptomatology was measured by the Center for Epidemiological Studies Depression Scale (CES-D), a 20 item inventory of depressive symptoms experienced in the past two weeks. The findings in this study suggest that depressive symptomatology increased during early adolescence and decreased around late adolescence.

Schonert-Reichl (1994) studied depressive symptoms in adolescence. This study consisted of 62 students from 12 to 17 years of age from a city in western Canada. Sixty-nine percent of the sample was White. Depressive symptoms were measured using the Reynolds Adolescent Depression Scale (RADS). This measure consists of 30 items with response choices ranging from *almost never* to *most of the time*. Scores can range from 30 to 120, with higher scores indicating higher levels of depressive symptoms. The sample was divided into two age groups, early adolescents (12-14) and middle adolescents (15-17). In the early adolescents the scores appeared to be lower than the scores of the middle adolescents. This indicates that there were more depressive symptoms in the middle adolescent age group than the early adolescent age group.

Another study finding the occurrence of depression to fluctuate during adolescence was by Nolen-Hoeksema, Seligman, and Girgus (1992). They conducted a five year longitudinal study on 352 students in a lower-middle to middle-class area in New Jersey. This study measured depression using the CDI, which is a 27-item modification of the Beck Depression Inventory to use with pre-adolescent children. Results indicated that as children grow older, they are less likely to have high depression scores. The children showed no evidence of decline in scores between 3rd and 9th grade. Also reported was that early depression predicted later depression.

Other studies do not find depressive mood to change in adolescence. A study by Allgood-Merten, Lewinsohn, and Hops (1990), studied 664 adolescents enrolled in a public high school in Oregon. The ages of the participants ranged from 13.26 to 18.8 years of age. The sample was predominately white, middle to upper-middle class in a suburban community. The CES-D was used to measure depressive symptoms. The CES-

D scores did not increase with age. This study also indicated that there were more depressive symptoms in adolescents than in adults.

Lewinson, Hops, Roberts, Seely, and Andrews (1993) studied 1,508 students in nine high schools in west central Oregon. Data was collected at two points in time by interviews. The Beck Depression inventory and the CES-D was used to measure depressive symptoms. Of all the psychiatric disorders studied, major depressive disorder (MDD) was the most common among the sample. No age effects for depression were found to be significant.

Marcotte, Alain, and Gosselin (1999) examined depressive symptoms during adolescence in relation to sex differences and age. This study consisted of 142 males and 164 females ages 14 to 17 years of age enrolled in high school in a community in Quebec. The Beck Depression Inventory (BDI) was used to measure depressive symptoms. The BDI is a self-report measure of 21 items measuring affective, behavioral, cognitive, and somatic symptoms of depression. Findings indicated that no differences were found between age groups.

Depressive Symptomatology and Gender Differences

In 1991, Nolen-Hoeksema summarized the findings on gender and depression. She found differences in the ways males and females responded to depression. She reported that women experience longer as well as more severe periods of depressive symptoms (Nolen-Hoeksema, 1991). She attributes this to the ways males and females deal with depression. Males distract themselves and engage in dangerous activities, and females tend to self-focus. Differences in gender and depressive symptomatology are reviewed here.

Schonert-Reichl (1994) had conflicting results on depressive symptoms and gender. This study consisted of 62 students from 12 to 17 years of age from a city in western Canada. 69% of the sample was White, and 23% was Asian. Depressive symptoms were measured using the Reynolds Adolescent Depression Scale (RADS). This measure consists of 30 items with response choices ranging from almost never to most of the time. Scores ranged from 30 to 120, with higher scores indicating higher levels of depressive symptoms. The sample was divided into two age groups, early adolescents (12-14) and middle adolescents (15-17). In the early adolescents the males scored higher on the RADS than did the females, although it was not significant. The middle adolescent females' scores were significantly higher than the males.

Marcotte, Alain, and Gosselin (1999) examined depressive symptoms during adolescence in relation to gender differences. This study consisted of 142 males and 164 females ages 14 to 17 years of age enrolled in high school in a community in Quebec. The Beck Depression Inventory (BDI) was used to measure depressive symptoms. The BDI is a self-report measure of 21 items measuring affective, behavioral, cognitive, and somatic symptoms of depression. Findings indicated that adolescent females experienced more depressive symptoms than males.

Cohen, Cohen, Kasen, Velez, Hartmark, Johnson, Rojas, Brook, and Streuning (1993) studied disorders in late childhood and adolescence for age and gender differences. A sample of 776 subjects ages 10-20 from New York City were studied. Depression was measured using the Diagnostic Interview Schedule for Children. It is used to predict symptoms of psychological disorders. In the age group 10-13, six out of 260 females and five out of 281 males had major depression. In the age group of 14-16,

20 out of 262 females and four out of 246 males had major depression. In the age group of 17-20, six out of 224 females and six out of 222 males had major depression. This indicated that more adolescent females between 14 and 16 suffer from major depression than males.

Another study that indicated more depressive symptomatology in females during adolescence is a study by Allgood-Merten, Lewinsohn, and Hops (1990). They studied 664 adolescents enrolled in a public high school in Oregon. The ages of the participants ranged from 13.26 to 18.8 years of age. The sample was predominately white, middle to upper-middle class and from a suburban community. The Center for Epidemiological Studies Depression Scale (CES-D) was used to measure depressive symptoms. Females reported more symptoms of depression than did males. Self-esteem correlated significantly with depression, as well as a negative body image. Depressive were demonstrated in every age group of females, and males did not.

Chen, Mechanic, and Hansel (1998) conducted a longitudinal study of the relationship between self-awareness and depressive symptomatology in 479 adolescents from 19 public schools in five communities in New Jersey. The data was collected first when the adolescents were in the 7^{th} grade, then in the 8^{th}, 9^{th}, and last when they were out of high school and approximately 20 years old. Depressive symptomatology was measured by the Center for Epidemiological Studies Depression Scale (CES-D), a 20 item inventory of depressive symptoms. Results indicated that females displayed significantly higher levels of depressive symptomatology than boys at the first three data collections, but not in the last.

Depressive symptomatology in 877 adolescents was studied by Siegel, Aneshensel, Taub, Cantwell, and Driscoll (1998). The participants were ages 12 to 17 from Los Angeles County California, with males and females equally represented. Depressive symptomatology was measured by the Children's Depression Inventory (CDI) consisting of 21 items assessing symptoms of depression in the past two weeks. Females reported more symptoms of depressive symptomatology than did males. Depressive symptoms were most evident in females with early physical maturational development and in males with late development.

A study by Reinhertz, Stewart-Berghauer, Pakiz, Frost, Moeykens, and Holmes (1989) examined depressive symptomatology in adolescence. The sample for this study was 378 adolescents from a predominantly White working-class community. The age of the subjects ranges from 13.6 to 16.3 years. The Children's Depression Inventory (CDI) was used to measure depressive symptomatology. The CDI is a 27-item scale for measuing depressive symptoms. Females were twice as likely to express depressive symptoms as males in this study.

Other studies support the gender differences in the occurrence of depression in adolescence. Lewinson, Hops, Roberts, Seely, and Andrews (1993) studied 1,508 students in nine high schools in west central Oregon. Data was collected at two points in time by interviews. The Beck Depression Inventory (BDI) and the Center for Epidemiological Studies Depression Scale (CES-D) was used to measure depressive symptoms. Of all the psychiatric disorders studied major depressive disorder (MDD) was the most common among the sample. Females were more likely to have MDD than male students, and females were also more likely to score higher on the CES-D.

In a cross-sectional study by Brage and Meredith (1994) depression in adolescence was examined in a sample of 156 adolescents who were attending public schools in four communities in the midwestern United States. Depression was measured using the Center for Epidemiological Studies Depression Scale for Children (CES-DC) This is a 20 item questionnaire measuring depressive symptoms from the past week, as indicated by assigning a number to the frequency of the event. The results from this study indicated that loneliness and self-esteem had a direct effect on adolescent depression. Also, self-esteem was found to have an indirect effect on depression through loneliness and age also directly and indirectly influenced depression through loneliness. Family strengths indirectly affected depression as well. Other findings indicated gender was significantly related to depression through self-esteem.

Depressive Symptomatology and Adolescent Mothers

According to Horowitz, Klerman, Sungkuo, and Jekel (1991), pregnancy is three times more likely among depressed adolescent females than among those who are not depressed. In a study conducted by Osofsky, Hann, and Peebles (1993), depression was more likely in adolescent mothers than older mothers. Gabrielson, Klerman, Currie, Tyler, and Jekel (1970) found evidence of frequent depressive disorders in adolescent mothers; also reported in the study was a 13% suicide attempt rate among adolescent mothers.

Wilcox, Field, Prodromidis, and Scafidi (1998) used the Beck Depression Inventory and the Center for Epidemiologic Studies Depression Scale (CES-D) to assess depression in 155 adolescent mothers from a maternity unit at a large urban university

hospital. Their ages ranged from 13 to 21 years. Findings indicated that the majority of the adolescent mothers were depressed, according to their BDI and CES-D scores.

In 1983 a study conducted by Barth and Schinke used 62 pregnant adolescent females, 63 parenting adolescent females, and a comparison group of 60 non-parenting adolescents from a major northwestern metropolitan area. This study focused on depression, anxiety, loneliness, self-esteem, socioeconomic status, and social supports. Depression was measured using the Beck Depression Inventory. Findings from this study indicated that pregnant and parenting adolescents had significantly higher depression scores than their non-parenting peers.

Depressive Symptomatology and Adolescent Fathers

The research on depressive symptomatology in adolescent fathers is not addressed in the current literature. There is little known about the psychological well-being of adolescent fathers, however Robinson and Barret's 1987 study did find some indications of psychological stress in adolescent fathers.

Robinson and Barret (1987) interviewed 20 adolescent fathers under age 18 during the prenatal period and again at four to six weeks following delivery. The study explored the stresses the subjects experienced as a result of the pregnancy. The stressors identified in the study were graded for severity. The stressors reported by the subjects were grouped into four categories: 1) vocational-educational concerns, 2) concerns about health of the mother and/or baby, 3) concerns about future parenthood, and 4) problems with relationships. They found that many of the concerns reported by adolescent fathers are similar to those experienced by older men who are experiencing additional stresses. The stressfulness of adolescent pregnancy was suggested by reports of somatic symptoms

and psychiatric problems experienced by the adolescent fathers. The study also revealed that the stressors changed in intensity throughout the pregnancy.

Relationship between Depression and Self-esteem

Researchers have found a relationship between self-esteem and depression. Self-esteem has been found to be an important variable in depression. Flippo and Lewinsohn (1971) found low self-esteem to be associated with higher levels of depressive symptoms. Other researchers have found the link as well. Kerns, Grannemann and Mathis (1991) found that the relation between low self-esteem and depression was stronger when self-esteem was consistently low than when it fluctuated. Also, Roberts, Gotlib, and Kasel (1996) found that level of self-esteem can predict the onset of depression.

The findings of these researchers were supported by Lewinsohn, Gotlib, and Seeley (1997). They studied psychosocial variables in 1,507 adolescents form urban schools in western Oregon. The Center for Epidemiological Studies Depression Scale (CES-D) was used to measure depression and the Rosenberg Self-Esteem Scale was used with Harter's Perceived Competence Scale for Children, as well as the Body Parts Satisfaction Scale. Findings indicated that depressed adolescents were more self-conscious and had lower self-esteem.

Gotlib & Kassel (1996) explored the relationship between several psychosocial variables and symptoms of depression, among the variables studied was self-esteem. The subjects of this study were 152 undergraduate students at a Northwestern University. There were 88 females in the sample. Depressive symptoms were measured by The Inventory to Diagnose Depression (IDD), which provides an index of severity of

depressive symptoms. Self-esteem was measured using Rosenberg's Self-Esteem scale. There were no significant differences in sex. Findings indicated that participants who expressed more depressive symptoms had lower self-esteem. They concluded that lower self-esteem is connected to elevated symptoms of depression.

Another study, which examined the relationship between low self-esteem and depression, was a study by Kernis, Grannemann, and Mathis (1991). Their study examined the stability of self-esteem and its relation to depression in 76 male and female undergraduate students. Self-esteem was measured using Rosenberg's Self-Esteem scale. Depression was measured using the Center for Epidemiological Studies Depression Scale (CES-D). The findings indicated an inverse relationship between level of self-esteem and depression. This pattern held true only for those with a stable low level of self-esteem. The authors indicated that individuals with stable low self-esteem would be most vulnerable to experiencing depression.

Summary

There is a need for research in the area of the psychological effects of adolescent pregnancy and parenting for both males and females. The psychological effects of early parenting may be seen in the self-esteem and depression of adolescent parents. Coley and Chase-Lansdale (1998) find a need for research using longitudinal studies to examine psychological variables such as self-esteem, individuation, and depression to determine their influence on sexual activity and early childbearing.

Overall, these mixed results indicate a need to look at the attitudes and psychological aspects of parenting adolescent males and females as compared to their

non-parenting peers. Due to society's decreasing stigmatization of adolescent parenthood more recent findings may help clarify the adjustment of adolescents to the parenting role.

Theoretical Framework

According to the Group for the Advancement of Psychiatry (1986) the period of adolescence is a stressful time, without non-normative events. Adolescence is a time of many changes, such as physical, psychological, and social changes, and is generally considered a stressful time during the life cycle. In addition to the stresses of adolescence the adolescent parent also has the stresses of the transition to parenting. The transition of becoming a parent is difficult even for women who are well psychologically. This transition is accompanied by psychological upheavals during the pregnancy as well as the adjustment to a new baby (Osofsky & Osofsky, 1980).

An adolescent parent experiences demands that a typical adolescent does not, and this adds to the normal stress of adolescence. Pregnant adolescents are faced with dual developmental crises: the situational crisis of pregnancy as well as adapting to parenthood. Stress accompanies the transition of pregnancy and parenting, and stress affects the psychological well-being of a parent (Crnic & Acevedo, 1995). Stress is conceptualized as the experience of a major life change (Holmes & Rahe, 1967). The construct of stress is useful in conceptualizing and understanding the transitions from one period of family or individual development to another. The period of adolescence is the time when the individual changes from a dependent child to an independent adult (Group for the Advancement of Psychiatry, 1986). Family Stress Theory (McCubbin & Patterson, 1983), particularly the Double ABCX Model, provides an excellent theoretical

framework to examine how the stress of adolescent pregnancy and parenting affects adolescents. This study utilized components of this model to seek a better understanding of the psychological well-being of adolescents.

The Double ABCX Model of Family Stress Theory looks at A (stressor event), and its interaction with B (the family's existing crisis meeting resources). B in turn interacts with C (the definition the family makes of the event), which then produces X (the crisis, or degree of disruption) (McCubbin & Patterson, 1983). The post-crisis variables of the Double ABCX Model best describe the experiences and psychological well-being of adolescent parents following the crisis of the pregnancy. The post-crisis variables include the additional life stressors and changes (aA), additional psychological and social factors the family perceives during crisis situations and post-crisis (bB), and the family's perception of the pile-up, resources, and the event (cC). Thus, these pre- and post-crisis factors result in the family's adaptation to the crisis. Adaptation exists as a continuum from poor adaptation (maladaptation) to positive adaptation (bonadaptation) (McCubbin & Patterson, 1983).

This model can help to explain the event of adolescent pregnancy and parenting and the process of adolescent adaptation to this situation. The event of an adolescent pregnancy is often untimely and unintended and causes disruption in the lives of adolescent parents; because of the pregnancy, the normative tasks of adolescence may be affected, influencing the adolescent's perception of the event. Adding to the stressful event itself is whether adolescent parents have the ability to meet the needs of the pregnancy and child. The resources to receive adequate prenatal care, as well as, to provide for the monetary needs of the child are not always available. The families of

adolescent parents are often not supportive of the event; therefore, depending on the degree of disruption, the adolescent pregnancy becomes a crisis in the lives of adolescent parents and their families. After the initial disruption of the pregnancy comes the post-crisis. The issues confronted during the pregnancy spill over to the postpartum period, and the crisis continues for adolescents while becoming a parent for the first time. The relationship with the other parent of the child is complicated adding more stress to the situation. Also, the daily hassles of parenting pile-up, and adolescent parents often do not have the resources to deal with the daily stress of parenting. The perception of the pile-up of events will be greatly influenced by the new and existing resources available to the adolescent parent, such as high self-esteem or a home visitation program. Thus, the level of adaptation is a function of the crisis involved in the initial stressor of pregnancy, pile-up of stressors, new and existing resources and the perception of all of these elements.

The present study used the Double ABCX Model to describe the psychological aspect of adolescent pregnancy and parenting. The variables examined were linked to this model. A high level self-esteem was considered to be resources to adolescents going into the crisis of adolescent. This study examined the self-esteem of adolescent parents before the pregnancy to determine if self-esteem was a predictor of the adolescent's adaptation to the role of parenthood in adolescence after the initial crisis of the pregnancy. Adolescent parents either adapt well (bonadaptation) or poorly (maladaptation) as seen in self-esteem and depression following the transition to parenthood. The level of adaptation for adolescents depends upon all the elements of the Double ABCX Model and some adolescent parents adapt better than others. These results were compared by gender and by parenting status.

Hypotheses

This study examined the level of self-esteem pre-pregnancy to determine if it predicted the adaptation of adolescent parents to the parenting experience, as seen in levels of self-esteem and depressive symptoms after becoming a parent. Adolescent parental status was expected to be related to the adolescents' level of self-esteem and depressive symptomatology. Gender was also expected to be related to self-esteem and depressive symptomatology.

Hypothesis 1

Males will report significantly higher levels of self-esteem at Time 2 than females.

Hypothesis 2

Non-parenting adolescents will report significantly higher self-esteem at Time 2 than parenting adolescents.

Hypothesis 3

There will be a significant positive correlation between self-esteem pre-pregnancy at Time 1 and self-esteem post-pregnancy at Time 2.

Hypothesis 4

Females will report significantly higher levels of depressive symptomatology than males.

Hypothesis 5

Adolescent parents will report significantly higher levels of depressive symptomatology than non-parenting adolescents.

Hypothesis 6

There will be a significant positive correlation between self-esteem pre-pregnancy and depressive symptomatology post-pregnancy.

Hypothesis 7

There will be a significant interaction between gender and parenting status in relation to self-esteem at Time 2.

Hypothesis 8

There will be a significant interaction between gender and parenting status in relation to depressive symptomatology.

CHAPTER III

METHODOLOGY

The data for this study was collected from the National Longitudinal Survey of Youth 1979 (NLSY79) conducted by the U.S. Department of Labor Bureau of Labor Statistics. The NLSY79 is a public use data set used by multiple disciplines in research and public policy. The data set used was from 1979-1996. The sample was drawn by a national probability sample from non-institutionalized young people living in the United States, with an over sampling of Hispanics, Blacks, and economically disadvantaged White youth. The number of respondents in the survey were 12,686 young men and women were between the ages of 14 to 22 when first surveyed in 1979, and 8,636 remained in the study in 1996, a retention rate of 86.6%. The data from adolescents was collected annually from 1979 to 1994, and then every other year after 1994 (NLS, 1999).

The NLSY79 has used a variety of methods to gather data over the course of years the survey has been administered. The method used from the years 1979 to 1992 was face to face interviews, excluding 1987 when the interviews were done by telephone. In 1993 the data gathering method was changed to computer-assisted interviewing (NLS, 1999).

Research Design

This study utilized the NLSY data set for examining the impact of becoming a parent as an adolescent on psychological well-being. Self-esteem was examined before the pregnancy for the adolescent parents as well as the control group of non-parenting adolescents. After the becoming a parent the same adolescents' self-esteem was measured again to determine how well adolescent parents adapt to the transition to parenthood. Depressive symptomatology was measured after becoming a parent as another indicator of the adolescent parents' adaptation to parenthood. This was a correlational study; it investigated the relationship between adolescent parenting status, gender, and self-esteem before pregnancy to predict later levels of self-esteem and depressive symptomatology after becoming a parent. The purpose of this study was to determine if sex, parental status, and level of self-esteem pre-pregnancy could predict self-esteem and depression after becoming a parent.

The variable self-esteem and was collected for all adolescents in 1980, and before the adolescent parents became parents, to determine if it could predict the adaptation of adolescents to parenthood. The variables self-esteem and depressive symptomatology were measured for adolescent parents in the first 10 years of their parenting experience. The adolescents who became parents in the years of 1982 and 1983 were used as the adolescent parent group for the purpose of this analysis. After the adolescents became parents their self-esteem was measured again to determine how well the adolescent parents adapted to the transition to parenthood. Adaptation was measured by the variables self-esteem (measured in 1987) and depressive symptomatology (measured in 1992). These variables were used to determine if the event of adolescent pregnancy

impacted the future psychological well-being of the adolescent parents. The measures of psychological well-being were, self-esteem (level of self-esteem, ranging from high to low) and depressive symptoms, which were also the dependent variables.

For this study the measures of psychological well-being, self-esteem at Time 2 and depressive symptomatology, were treated as dependent variables. The independent variables were the adolescent parental status, either an adolescent parent or not an adolescent parent, gender of the adolescent, and self-esteem pre-pregnancy at Time 1.

Sample

The original NLSY79 sample was drawn by a probability sample of men and women ages 14-21 with an overrepresentation of Blacks, Hispanics, and economically disadvantaged non-Black/non-Hispanics (NLS, 1999). The NLSY79 data were weighted to reflect the nation as a whole; therefore there were no biases to using this data for the sample. The sample used in the present study was reflective of the national population in 1979.

The NLSY79 data was used to draw the sample. The original sample of 12,686 cases was narrowed to 231. First, the sample was narrowed by only using respondents who were under the age of 19 in 1982 and 1983, all others were eliminated from the sample. Next, all respondents who had a child before 1982 and between the years of 1984 and 1987 were eliminated from the sample. The remaining respondents were then randomly narrowed and used as the sample for the analysis. The sample consisted of 231 respondents who were under the age of 19 in the years of 1982 and 1983. After the sample was obtained, it was then divided into two groups by parental status: those who

became a parent before the age of 19, and those who did not become a parent before the age of 19. Parental status was determined by the respondent's answer to the question, "What was your age at the birth of your first child?" The two groups then were divided by gender into four groups: females who became a parent before the age of 19 who had their first child in either 1982 or 1983 (adolescent mother group), males who became a parent before the age of 19 who had their first child in either 1982 or 1983 (adolescent father group), females who did not become a parent before the age of 19 (non-parenting female peer group), males who did not become a parent before the age of 19 (non-parenting male peer group). Parental status was dummy coded, with parents coded as 1 and non-parents coded as 0. The sex was also dummy coded, males coded as 1 and females coded as 0.

The subjects in this study were adolescent mothers, adolescent fathers, and their non-parenting peers. The adolescent parent group consisted of adolescents who were between the ages of seventeen and nineteen when becoming parents in the years of 1982 and 1983. The non-parenting adolescent peer group consisted of adolescents between the ages of seventeen and nineteen in 1982 and 1983. The non-parenting adolescents did not become a parent until after 1987.

The total sample for this study was 231. The sample consisted of 83 adolescent mothers, 32 adolescent fathers, 58 non-parenting adolescent females, and 58 non-parenting adolescent males. The sample was 19% Hispanic, 30% Black, and 51% Non-Black, Non-Hispanic.

Instruments

A self-report questionnaire was used to collect the data. For the purposes of this analysis the dependent variables were measured by standardized measurements used in the NLSY79 data set. Self-esteem was measured in 1980 and 1987, using the Rosenberg Self-esteem Scale (Rosenberg, 1979). Depressive symptomatology also was measured in 1992, using the CES-D (Radloff, 1977), after the adolescent parents became a parent as another indicator of the adolescent's adaptation to the pregnancy. The measures of self-esteem and depression were compared by gender, as well as parental status.

Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (Rosenberg, 1979) was used to measure self-esteem in this study in the years of 1980 and 1987. This self-report measure consisted of ten questions in which the respondents rate their agreement with statements that describe what they are like. Response choices ranged from "strongly agree" to "strongly disagree. An example statement from this measure is, "On the whole I am satisfied with myself"(See Appendix B). Lower scores indicated higher levels of self-esteem. A Cronbach's coefficient alpha of .67 was established for this 10-item scale for the survey year of 1987 using the current data. This data also yielded an internal consistency reliability coefficients (Cronbach's alpha) of .79 for the survey year of 1980.

Center for Epidemiological Studies Depression Scale (CES-D)

Depressive Symptomatology was measured in 1992 using the Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977). The CES-D was specifically constructed to measure depressive symptoms, and was intended to be used with cross-sectional samples in survey research (Radloff, 1977). The CES-D is

composed of twenty questions with response choices ranging from "rarely to none of the time" to "most or all of the time". An example question from the CES-D is "I am bothered by things that usually do not bother me"(See Appendix B). The current data yielded an internal consistency reliability coefficients (Cronbach's alpha) of .87.

Statistical Analyses

Hierarchical Multiple Regression

Hierarchical Multiple Regressions were used to determine the percent of variance in the outcome variables accounted for by the linear combination of the predictor variables (Pedhazur, 1997). Bivariate correlations were examined first to evaluate the significance of correlations among the three predictor variables, and also the two outcome variables to be used in the multiple regression analysis. Next, separate hierarchical multiple regression analyses were used (See Figure 1) to examine the extent to which gender of the adolescent (Step 1) parental status (Step 2), and pre-pregnancy resource self-esteem (Step 3) contribute to the outcome variables of self-esteem and depressive symptomatology. Prior to data analysis, the sex and parental status of the adolescent were dummy coded (male = 1 and female = 0, parent = 1, non-parent = 0, Pedhazur, 1997). Separate bivariate correlation analyses were conducted for outcomes of self-esteem and depression. Steps in regression models account for unique contributions for each set of predictor variables to the variance in the outcome variables.

All variables were entered into each of the hierarchical multiple regression equations using a default value of .10 as the low level of tolerance. Results of the

multiple regression analyses using this tolerance level indicated that multicollinearity was not a problem in either of the models (Pedhazur, 1997).

Two-Way ANOVA

Two way ANOVA was used to test for an interaction between gender and parenting status in relation to self-esteem and depressive symptomatology. Two-way ANOVA was used to sort out the effects of the two explanatory variables gender and parental status (Babbie, 1983). The alpha level used to determine significance for the multivariate analysis of variance computations was less than .05. The independent variables for this analysis were parental status and gender. The scores for the Rosenberg Self-Esteem Scale and the Center for Epidemiological Studies Depression Scale were the dependent variables for this analysis.

CHAPTER IV

RESULTS

The purpose of this study was to determine if gender, parental status, and self-esteem pre-pregnancy predicted the level of self-esteem and depression after becoming an adolescent parent. Another purpose was to determine if adolescent parents had a lower self-esteem and expressed higher levels of depressive symptomatology than their non-parenting peers. The measures for these variables and mean scores for the subjects are listed in Tables 1 and 2.

Insert Tables 1 and 2 here.

Bivariate Correlations

Bivariate correlations were used to examine the relationship between the predictor variables (gender, parental status, and pre-pregnancy Self-esteem Time 1) and outcome variables (Self-esteem Time 2 and depressive symptomatology). Significant correlations were found and are listed in Table 3. Depressive Symptomatology was positively correlated with Self-esteem Time 1, Self-esteem Time 2, and Parental Status. Self-esteem Time 1 was positively correlated with Self-esteem Time 2 and Parental Status.

Insert Table 3 about here

Hierarchical Multiple Regression Analyses

Hierarchical multiple regression analyses were used to determine (1) the contributions of the sets of predictor variables in explaining the variance in the outcome variable, and (2) the significance level of specific beta coefficients within the models (Pedhazur, 1997). Separate hierarchical multiple regression analyses were conducted for self-esteem and depressive symptoms.

Two research models were developed to test hypotheses one through six. Model 1 tested hypotheses one, two, and three. The model examined the extent to which gender, parental status, and pre-pregnancy self-esteem at Time 1 predicted self-esteem at Time 2. In Step 1, gender of the adolescent was entered into the regression equation. In Step 2, the parental status of the adolescent was entered into the equation. In Step 3, adolescents' self-esteem at Time 1 was also entered into the equation. Model 2 tested hypotheses four, five and six. This model examined the extent to which gender, parental status, and self-esteem at Time 1 predicted depressive symptoms. Model 2 followed the same steps outlined for Model 1, except depressive symptomatology was entered as the outcome variable. The results for the hierarchical multiple regression models are presented in Tables 4 and 5.

The first hierarchical regression model did not support hypothesis 1, which stated that males would report significantly higher levels of self-esteem at Time 2 than females.

Hypothesis 2 predicted that non-parenting adolescents would report significantly higher self-esteem at Time 2 than parenting adolescents; the model also did not support this. Hypothesis 3 predicted there would be a significant positive correlation between self-esteem pre-pregnancy at Time 1 and self-esteem post-pregnancy at Time 2; this was supported by the model.

Insert Table 4 about here

In Step 1, gender was not significantly related to self-esteem Time 2 (β = -.04, p = .58). In Step 2, neither gender (β= -.01, p = .91) nor parental status (β= .12, p = .07) were significantly related to self-esteem Time 2. In Step 3, self-esteem at Time 1 was entered, along with parental status, and gender. Self-esteem at Time 1 (β= .39, p <.01) explained a significant increment of variance in self-esteem at Time 2 (ΔR^2=.15, p <.001) beyond that accounted for by gender (β= -.01, p = .87) and parental status (β= .06, p = .37). The model accounted for 16% of the variance in self-esteem at Time 2.

The second hierarchical multiple regression model did not support hypothesis 4, which predicted that females would report significantly higher levels of depressive symptomatology than males. However, hypothesis 5, which predicted adolescent parents would report significantly higher levels of depressive symptomatology than non-parenting adolescents was supported by this model. Hypothesis 6 predicted a significant negative correlation between self-esteem pre-pregnancy and depressive symptomatology post-pregnancy, and also was supported by this model.

Insert Table 5 about here

In Step 1, gender was not significantly related to depressive symptomatology (β = .04, p = .61). In Step 2, Parental status (β = .20, p <.01) was significantly related to depressive symptomatology. In Step 3, self-esteem at Time 1 was entered along with parental status and gender to determine significance in predicting depressive symptomatology. Both self-esteem at Time 1 (β = .22, p <.01) and parental status (β = .17, p = .02) were found to be significant predictors of depressive symptomatology, but gender (β = .07, p = .34) was not. Step 2 (ΔR^2=.04, p <.01).and step 3 (ΔR^2=.04, p <.01) accounted for a significant amount of the variance in depressive symptomatology. The model explained 9% of the variance in depressive symptomatology.

Two-Way Anova

Another purpose of this study was to determine if adolescent parents had a lower self-esteem and expressed higher levels of depressive symptomatology than their non-parenting peers, as well as to compare adolescent mothers, adolescent fathers, non-parenting females, and non-parenting males on these same measures of psychological well-being. This analysis was used to determine if there was an interaction between the variables gender and parental status. This was measured with scores for self-esteem and depressive symptomatology for individuals who became a parent as an adolescent (adolescent parents) and those who did not (non-parenting adolescents). Mean scores by

gender and by parental status for measures of self-esteem and depression were compared. Hypotheses 7 and 8 were tested using two separate Two-way ANOVAS.

Hypothesis 7 stated that there would be a significant interaction between gender and parenting status in relation to self-esteem at Time 2. The results of the two-way ANOVA showed that this hypothesis was not supported. The interaction between gender and parental status in relation to self-esteem at Time 2 was non-significant ($F = .24$, $p = .63$). The results indicated that the main effect of parental status on self-esteem was approaching significance ($F = 3.87$, $p = .05$), although the main effect for gender was not significant ($F=.00$, $p=.99$). See Table 6.

Insert Table 6 about here

Hypothesis 8 stated that there would be a significant interaction between gender and parenting status in relation to depressive symptomatology. The results of the two-way ANOVA showed that this hypothesis was not supported. The interaction between gender and parental status in relation to depressive symptomatology was non-significant ($F = 2.55$, $p = .11$), but there was a significant main effect for parental status ($F = 6.17$, $p = .01$), indicating parental status was related to depressive symptomatology. There was a significant difference in the mean scores for depressive symptomatology with the mean scores for indicating that parents had significantly higher levels of depressive symptomatology than individuals who did not become a parent as an adolescent. The main effect for gender was not significant ($F=.98$, $p=.32$). See Table 7.

Insert Table 7 about Here

CHAPTER V

DISCUSSION

Family Stress Theory proposes that individuals who experience a stressful event, such as an adolescent pregnancy, can adapt to the situation either with maladaptation or bonadaptation (McCubbin & Patterson, 1983). According to this theory, pileup, perceptions, and resources an individual has in response to a stressor can influence adaptation. This study examined the event of adolescent pregnancy from the perspective of Family Stress Theory.

Adaptation was measured by self-esteem and depressive symptomatology; these measures also are indicative of psychological well-being. This study used self-esteem pre-crisis to predict adaptation post-crisis. The current research also compared the psychological well-being of adolescent parents with individuals who did not become parents as adolescents using these same measures of psychological well-being. This study examined selected variables (gender, parental status, and self-esteem pre-pregnancy) to determine the impact of becoming an adolescent parent on the psychological well-being of the individual. The results of this research provided partial support for the hypotheses regarding the psychological well-being of adolescent fathers and mothers, as well as the psychological well-being of adolescent parents as compared to those who did not become parents as adolescents.

Self-esteem

Hierarchical multiple regression analysis was used to examine the extent to which gender of the adolescent, parental status, and pre-pregnancy resource self-esteem contributed to the outcome variable of self-esteem. The model did not support all of the hypotheses in this study relating to self-esteem as an indicator of psychological well-being of adolescent parents. The model only provided partial support for predictors of self-esteem.

Hypothesis 1: Males will report significantly higher levels of self-esteem at Time 2 than females. The first step of this model did not support hypothesis 1. The results of this analysis indicated that there was not a significant relationship between gender and level of self-esteem. Most of the research focusing on self-esteem has indicated females to have lower self-esteem than males. The findings of this study were not consistent with previous studies by Richman, Clark, and Brown (1985) and Zimmerman, Copeland, Shope, and Dielman (1997), who found males to have higher levels of self-esteem than females. Richman, Clark, and Brown (1985) measured general self-esteem using the Rosenberg Self-esteem scale for a sample of 195 adolescents enrolled in public high schools in North Carolina. Findings from this study indicated that White females had lower self-esteem than did both White and Black males, as well as Black females. These findings indicate gender differences in self-esteem using the same measure of self-esteem with a similar sample size as the present study.

Zimmerman, Copeland, Shope, and Dielman (1997) measured self-esteem using a shortened version of Coopersmith's self-esteem scale. The sample for this study was 575 females and 585 males, a much larger sample than the current study. There are other

differences, which could account for the discrepancy between the findings of this study and the present study. This sample was drawn from younger adolescents (sixth, seventh, eighth, and tenth graders). Younger adolescents, while still adolescents, do not have the same pressures as older adolescents; therefore, this could affect their scores for self-esteem. Also, the Coopersmith self-esteem inventory appears to be more tailored to students than the Rosenberg Self-esteem scale. The Coopersmith includes questions about school, friends, family, and other more specific questions, such as, "Do you get a lot of attention at home?" Whereas the Rosenberg has more general questions mainly focused on individual qualities, for example, "I wish I could have more respect for myself." If the Rosenberg had been used findings might have been different.

Thornburg and Jones (1982) found females to have higher self-esteem than males. This study measured self-esteem using the Rosenberg Self-esteem scale as well, but with a sample of 2561 students. Females exhibited significantly higher levels of self-esteem than did males in this study. It is important to mention that self-esteem was measured at a younger age. This study measured self-esteem in grades 4 through 9. These higher scores for females could be due to the possibility that self-esteem was measured pre-puberty for females. This could affect their scores for self-esteem. The females of this age are not experiencing the pressures of dating or balancing a job with school. These issues could influence their self-esteem scores.

The findings of this analysis were consistent with the findings by Mullis, Mullis, and Normandin (1992), who found no differences in self-esteem by gender. Mullis, Mullis, and Normadin's 1992 longitudinal study used a similar sample size of 297. Self-esteem was measured using the Coopersmith Self-Esteem Inventory of 50 items, and

found no significant differences in mean self-esteem scores by gender. This could be due to the more flexible expectations by gender. There are increasingly more opportunities for females to participate in; therefore, they have more opportunities to explore interests that can boost their self-esteem. The findings of this study contradicted most of the literature, and more studies are needed to clarify if indeed gender is related to the level of self-esteem of adolescents.

Hypothesis 2: Non-parenting adolescents will report significantly higher self-esteem at Time 2 than parenting adolescents. This model did not support hypothesis 2. The findings of the analysis supported the findings of Medora, Goldstein, & von der Hellen, (1994) who found no difference in the self-esteem of pregnant and non-pregnant adolescents. This study measured self-esteem using Bachman Self-esteem scale. The Bachman scale was similar to the Rosenberg; they both are 10-item likert type scales. The sample for this study included 255 pregnant adolescents, 121 adolescent mothers, and 273 non-pregnant/ non-parenting adolescent females. No significant differences between mean scores for the three groups could be attributed to the adolescent's self-esteem being influenced by a feeling of being needed by their child. The adolescents may view themselves as more like an adult and mature because they are a parent, and therefore enhancing their level of self-esteem.

Hypothesis 3: There will be a significant positive correlation between self-esteem pre-pregnancy at Time 1 and self-esteem post-pregnancy at Time 2. Hypothesis 3 was supported by this model. The findings indicated that the level of self-esteem Time 1 significantly related to the self-esteem Time 2. The Pearson Correlation indicated Self-esteem at Time 1 to be positively correlated with Self-esteem at Time 2; this correlation

was significant at the .01 level. Self-esteem in 1980 predicted self-esteem in 1987. Paired T-tests revealed significant differences in the means of Self-esteem Time 1 and Self-esteem Time 2. This could be due to the large number of teen parents in the sample, which could change the mean for Self-esteem at Time 2. Other researchers have found self-esteem to remain stable throughout the period of adolescence. Savin-Williams and Demo (1984) found no changes in self-esteem during adolescence from seventh grade to tenth grade. Self-esteem was measured using Rosenberg's Self-esteem Scale and Coopersmith's Self-Esteem Inventory. These measures indicated self-esteem to remain stable over time, which is the same as the findings in the present study.

O'Malley and Bachman (1983) studied self-esteem between the ages of 13 and 23, and found self-esteem to increase with age. The sample of two groups of 1,200 was used for this study. The Rosenberg scale was used to measure self-esteem for this sample. This large sample provided evidence that self-esteem does increase with time.

Cairns, McWhirter, Duffy, and Barry (1990) found self-esteem to remain steady, but did increase over time in adolescence in their study of 2490 adolescents with an average age of 17. Self-esteem was measured using Harter's Perceived Competence Scale for Children. These slight increases in self-esteem contradict the findings of the present study. More research is needed to determine if self-esteem does remain stable during adolescence.

Depressive Symptomatology

A second hierarchical multiple regression model was used to examine the extent to which gender of the adolescent, parental status, and pre-pregnancy resource self-esteem contributed to the outcome variable of depressive symptomatology. The model

provided partial support for the hypotheses in this study relating to depressive symptomatology.

Hypothesis 4: Females will report significantly higher levels of depressive symptomatology than males. This step of the model did not support hypothesis 4. The results of the analysis indicated that there was not a significant relationship between gender and level of depressive symptomatology. The findings do not support the findings of previous researchers who all found higher levels of depressive symptomatology in females than in males (Nolen-Hoeksema, 1991; Schonert-Reichl, 1994; Marcotte, Alain, and Gosselin, 1999; Cohen, Cohen, Kasen, Velez, Hartmark, Johnson, Rojas, Brook, and Streuning, 1993; Allgood-Merten, Lewinsohn, and Hops, 1990; Chen, Mechanic, and Hansel, 1998; Siegel, Aneshensel, Taub, Cantwell, and Driscoll,1998; Reinhertz, Stewart-Berghauer, Pakiz, Frost, Moeykens, and Holmes, 1989; Lewinson, Hops, Roberts, Seely, and Andrews,1993).

Chen, Mechanic, and Hansel (1998) collected data for depression in adolescence over a seven year period. The Center for Epidemiological Studies Depression Scale (CES-D) was used to measure depressive symptomatology. Females were found to have significantly higher levels of depressive symptomatology than males, and these findings are consistent with findings of other researchers (Schonert-Reichl, 1994; Marcotte, Alain, and Gosselin, 1999; Cohen, Cohen, Kasen, Velez, Hartmark, Johnson, Rojas, Brook, and Streuning, 1993) who found females to have more depressive symptoms than males during adolescence.

Allgood-Merten, Lewinsohn, and Hops (1990) measured depressive symptomatology using the CES-D. The sample of 686 students yielded findings similar

to those of other researchers. They found females to exhibit higher levels of depressive symptomatology than did males. The females in this study also reported higher levels of self-consciousness, and the authors of this study found low self-esteem to be correlated with higher levels of depressive symptomatology.

Hypothesis 5: Adolescent parents will report significantly higher levels of depressive symptomatology than non-parenting adolescents. The second step of this model supported hypothesis 5; the results of the analysis indicated that there was a significant relationship between parental status and level of depressive symptomatology. As hypothesized, parents had higher levels of depressive symptomatology than non-parents. This finding was significant at the .01 level. These results were consistent with findings from a study conducted by Barth, Schinke, and Maxwell in 1983 which found parenting adolescents to have higher levels of depressive symptoms than non-parenting adolescents. Barth, et al. (1983) used the Beck Depression Inventory to measure depression in a sample of 62 adolescent mothers, 63 pregnant teens, and 60 non-parenting teens, and found significant differences in scores for depression among pregnant, parenting, and non-parenting adolescents. Although this study used comparison groups, it did not examine the same measures in adolescent fathers. Also, this study used a different measure for depression; findings might have been different using the Center for Epidemiological Studies Depression Scale.

The higher level of depressive symptomatology in the current study could have been related to the lack of social interaction adolescent parents have, as well as lower socio-economic status and low level of education (Furstenberg, 1976; Hofferth & Hayes,

1987). More research is need to determine if parental status does influence depressive symptomatology. Further studies may support the findings of this study.

Hypothesis 6: There will be a significant positive correlation between self-esteem pre-pregnancy and depressive symptomatology post-pregnancy. This hypothesis was supported by the model. The results of this analysis indicated that there was a significant relationship between level of self-esteem and depressive symptomatology. Self-esteem Time 1 was found to be a contributor to the level of depressive symptomatology. These findings are consistent with findings by researchers who found low self-esteem to be associated with higher levels of depressive symptoms (Kerns, Grannemann, and Mathis, 1991; Flippo and Lewinsohn, 1971). Roberts, Gotlib, and Kasel (1996) found that the level of self-esteem can predict the onset of depression, thus, the link between low self-esteem and depression, was supported by this study as well.

Allgood-Merten, Lewinsohn, and Hops (1990) measured depressive symptomatology using the CES-D. The sample of 686 students yielded findings similar to those of other researchers. They found females to exhibit higher levels of depressive symptomatology than did males. The females in this study also reported higher levels of self-consciousness, and the authors of this study found low self-esteem to be correlated with higher levels of depressive symptomatology. Self-esteem has been defined as "a person's feeling that he or she is an important, competent, powerful, and worthwhile person whose efforts to be autonomous and take initiative are respected and valued by others" (Harter, 1983). Thus, it would seem plausible that a negative self perception would be related to depressive symptomatology.

Self-esteem, Gender, and Parental Status

Two-way ANOVA was used to test for an interaction between gender and parenting status in relation to self-esteem. The independent variables for the analysis were parental status and gender. The mean scores for the Rosenberg Self-Esteem Scale were used to operationalize the dependent variable for this analysis.

Hypothesis 7: There will be a significant interaction between gender and parenting status in relation to self-esteem at Time 2. The results of the two-way ANOVA did not support this hypothesis. The interaction between gender and parental status in relation to self-esteem at Time 2 was non-significant. These findings were not consistent with findings by Barth, Schinke, and Maxwell (1983) who found adolescent mothers to have lower self-esteem than non-parenting females using the Rosenberg Self-esteem scale. It was expected that female parents would report lower self-esteem than all other groups, due to the added demands and responsibilities of parenting. The results of the present study indicated that the relationship between parental status and self-esteem was approaching significance; adolescent parents had lower scores for self-esteem, but not enough different to be significant. These findings indicate that further examination is needed to determine if becoming a parent as an adolescent does indeed influence self-esteem.

Depressive Symptomatology, Gender, and Parental Status

Hypothesis 8: There will be a significant interaction between gender and parenting status in relation to depressive symptomatology. A second two way ANOVA was used to test for an interaction between gender and parenting status in relation to depressive symptomatology. The independent variables for the analysis were parental

status and gender. The scores for the Center for Epidemiological Studies Depression Scale were the dependent variables for this analysis. The results of the two-way ANOVA show that this hypothesis was not supported.

The interaction between gender and parental status in relation to depressive symptomatology was non-significant, but there was a significant main effect for parental status, indicating parental status is related to depressive symptomatology. There was a significant difference in the mean scores for depressive symptomatology with the mean scores indicating that adolescent parents had significantly higher levels of depressive symptomatology than individuals who did not become a parent as an adolescent. These results were consistent with findings from a study conducted by Barth and Schinke in 1983 which found parenting adolescents to have higher levels of depressive symptoms than non-parenting adolescents.

The higher level of depressive symptomatology in the current study could have been related to the lack of social interaction adolescent parents have, as well as lower socio-economic status and a lower level of education (Furstenberg, 1976; Hofferth & Hayes, 1987). More research is need to determine if parental status does influence depressive symptomatology. Further studies may support the findings of this study.

Limitations

The results of this study might have been different if Time 2 self-esteem and depressive symptomatology could have been measured in the same year. The measurement of the psychological well-being also might have been more effective if it were measured closer to the transition to parenthood. An ideal time to measure these

variables would have been during the transition time to parenthood within the first or second year of parenthood. However, the original study was looking at the long-term effects in the adaptation of adolescents to parenthood; therefore, the measures were measured later in the parenting experience.

Another limitation to this study was the size of the sample. As with many studies including adolescent fathers, the sample was small. Adolescent fathers were a hard to reach population, and once again it was difficult to obtain a large enough sample of adolescent fathers.

Implications

These findings need to be considered by practitioners working with adolescent parents. The many role changes associated with parenthood, combined with the stress of the untimely event of parenthood, adds to the strain of the adolescent parent. How adolescent parents adapt to the role of parenthood is still in need of further research. Adolescent parenthood may be perceived as a crisis due to its untimely and unplanned nature.

Practitioners need to be aware of the risk for depression in the adolescent parents with whom they are working. Adolescent parents appear to have a greater problem with depressive symptoms than with self-esteem. Researchers have found low self-esteem and depression to be associated with more behavior problems in toddlers (Osofsky, Culp, Eberhart-Wright, Ware, & Hann, 1988). This is evidence of the impact of the psychological well-being on the individual as well as their children. Through

understanding the psychological functioning of adolescent parents, practitioners will be more effective in providing services to them and their children.

Suggestions for Future Research

More research is needed in the area of the psychological well-being of adolescent parents. The findings of this study indicate that adolescent parents exhibit higher levels of depressive symptomatology than their non-parenting peers. More research is needed to determine what needs to be done to prevent adolescent parents from becoming depressed. Also, the findings of this study showed that the relationship between parental status on self-esteem was approaching significance. These findings indicate that further examination is needed to explain the relationship between becoming a parent as an adolescent and self-esteem. Is self-esteem a predictor of adolescent pregnancy, or is adolescent pregnancy a predictor of self-esteem? More research is needed to determine the relationship between self-esteem and adolescent pregnancy and parenting.

More longitudinal research is needed to understand the process of adaptation of adolescents to parenthood. These measures of psychological well-being need to be measured during the transition to parenthood as well as later in life to determine the degree of disruption and adaptation to the role of parenthood. More research also needs to be done using comparison groups of individuals who did not become a parent as an adolescent to determine the degree of disruption due to becoming a parent as an adolescent.

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APPENDICES

APPENDIX A

TABLES AND FIGURES

Table 1: Mean of Measures-Theoretical Range and Real Range

Measure	# of Items	Theoretical Range	Range for Sample	Mean for Sample Time 1	Mean for Sample Time 2
Rosenberg Self-Esteem Scale (Rosenberg, 1979)	10	10-40	12-27	20.45	18.30
CES-D (Radloff, 1977)	20	0-60	0-43	10.79	

Table 2: Mean of Measures for Subject Groups

Measure	Non-Parenting Females	Adolescent Mothers	Non-Parenting Males	Adolescent Fathers
Self-Esteem Scale (Rosenberg, 1979)	17.98	18.63	17.78	18.84
CES-D (Radloff, 1977)	7.43	12.79	10.83	12.00

Table 3: Bivariate Correlations

		1	2	3	4	5
1.	Self-esteem (Time 2)	____				
2.	Depressive Symptomatology	.27***	____			
3.	Gender[a]	- .03	.05	____		
4.	Parental Status[b]	.13	.19**	-.23***	____	
5.	Self-esteem (Time 1)	.40***	.25**	-.04	.17*	____

*** Correlation is significant at the 0.001 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

[a] Dummy coded (male 1, female 0)

[b] Dummy coded (parent 1, non-parent 0)

Table 4: Results of the Hierarchical Multiple Regression Model 1

	Self-Esteem				
	b	SE	β	ΔR^2	F
Step 1					
Gender	-.23	.43	-.04	.00	.30
Step 2					
Gender	-5.10	.44	-.01		
Parental Status	.78	.43	.12	.02	1.81
Step 3					
Gender	-6.58	.40	-.01		
Parental Status	.36	.40	.06		
Self-Esteem (Time 1)	.33	.05	.39**	.15	14.26***
Total R^2				.16[a]	

[a] Rounding error

***p<.001; **p<.01; *p<.05

Table 5: Results of the Hierarchical Multiple Regression Model 2

	Depressive Symptomatology				
	b	SE	β	ΔR^2	F
Step 1					
Gender	.68	1.34	.04	.00	.26
Step 2					
Gender	1.28	1.34	.07		
Parental Status	3.75	1.31	.20**	.04	4.23**
Step 3					
Gender	1.25	1.31	.07		
Parental Status	3.07	1.30	.17*		
Depressive Symptomat-ology	.55	.18	.22**	.05	6.23**
Total R^2				.09	

**p<.01; *p<.05

Table 6: Results of the Two-way ANOVA for Self-Esteem.

	Mean	df	F
Parental Status[a]		1	3.87
Non-Parent	17.88		
Parent	18.69		
Gender[b]		1	.00
Male	18.16		
Female	18.36		
Parent & Gender		1	.24

[a] Dummy coded (parent 1, non-parent 0)
[b] Dummy coded (male 1, female 0)
**p<.01; *p<.05
R^2 = .018

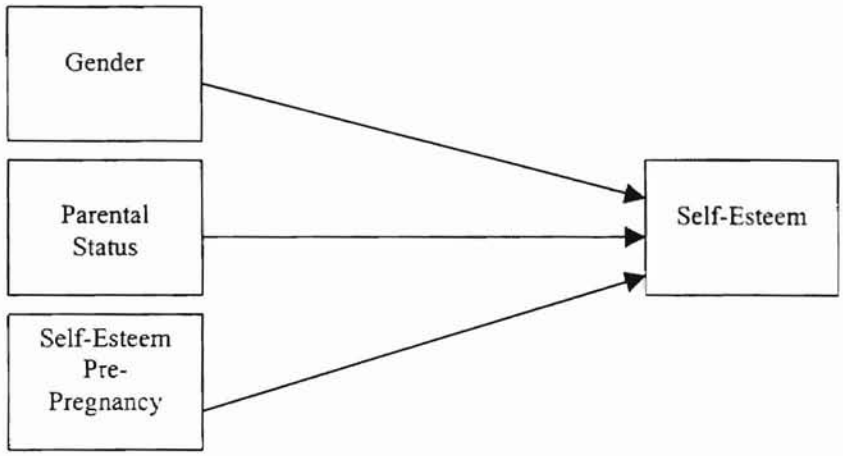
Table 7: Results of the Two-way ANOVA for Depressive Symptomatology.

	Mean	df	F
Parental Status[a]		1	6.17**
Non-Parent	9.05		
Parent	12.54		
Gender[b]		1	.98
Male	11.30		
Female	10.45		
Parent & Gender		1	2.55

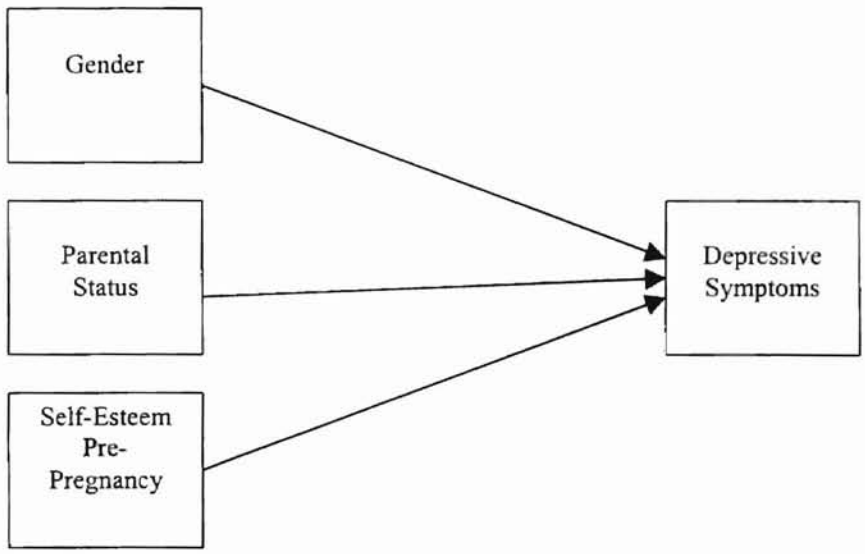
[a] Dummy coded (parent 1, non-parent 0)
[b] Dummy coded (male 1, female 0)
**p<.01; * p<.05
R^2 = .055

Figure 1: Regression Models

Model 1: Self-esteem



Model 2: Depressive Symptoms



APPENDIX B

INSTRUMENTS

A-1 New York State Self-Esteem Scale

(Rosenberg Self-Esteem)

The RSE is a 10-item Guttman scale with a Coefficient of Reproducibility of 92 percent and a Coefficient of Scalability of 77 percent. Respondents are asked to strongly agree, agree, disagree, or strongly disagree with the following items (asterisks represent low self-esteem responses):

(1)	On the whole, I am satisfied with myself.	SA	A	D*	SD*
(2)	At times I think I am no good at all.	SA	A	SD	SD
(3)	I feel that I have a number of good qualities.	SA	A	D*	SD*
(4)	I am able to do things as well as most other people.	SA	A	D*	SD*
(5)	I feel I do not have much to be proud of.	SA*	A*	D	SD
(6)	I certainly feel useless at times.	SA*	A*	D	SD
(7)	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D*	SD*
(8)	I wish I could have more respect for myself.	SA*	A*	D	SD
(9)	All in all, I am inclined to feel that I am a failure.	SA*	A*	D	SD
(10)	I take a positive attitude toward myself.:	SA	A	D*	SD*

(Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.)

CES-D Scale

Instructions for Questions: Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

0. Rarely or None of the Time (Less than I Day)
1. Some or a Little of the Time (1 -2 Days)
2. Occasionally or a Moderate Amount of Time (3-4 Days)
3. Most or All of the Time (5-7 Days)

	Rarely	Some	Moderate	Most
1. I was bothered by things that usually don't bother me.	0	1	2	3
2. I did not feel like eating; my appetite was poor.	0	1	2	3
3. I felt that I could not shake off the blues even with help from my family or friends.	0	1	2	3
4. I felt that I was just as good as other people.	0	1	2	3
5. I had trouble keeping my mind on what I was doing.	0	1	2	3
6. I felt depressed.	0	1	2	3
7. I felt that everything I did was an effort.	0	1	2	3
8. I felt hopeful about the future.	0	1	2	3
9. I thought my life had been a failure.	0	1	2	3
10. I felt fearful.	0	1	2	3
11. My sleep was restless.	0	1	2	3
12. I was happy.	0	1	2	3
13. I talked less than usual.	0	1	2	3
14. I felt lonely.	0	1	2	3
15. People were unfriendly.	0	1	2	3
16. I enjoyed life.	0	1	2	3
17. I had crying spells.	0	1	2	3
18. I felt sad.	0	1	2	3
19. I felt that people dislike me.	0	1	2	3
20. I could not get "going."	0	1	2	3

(Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 385-401.)

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